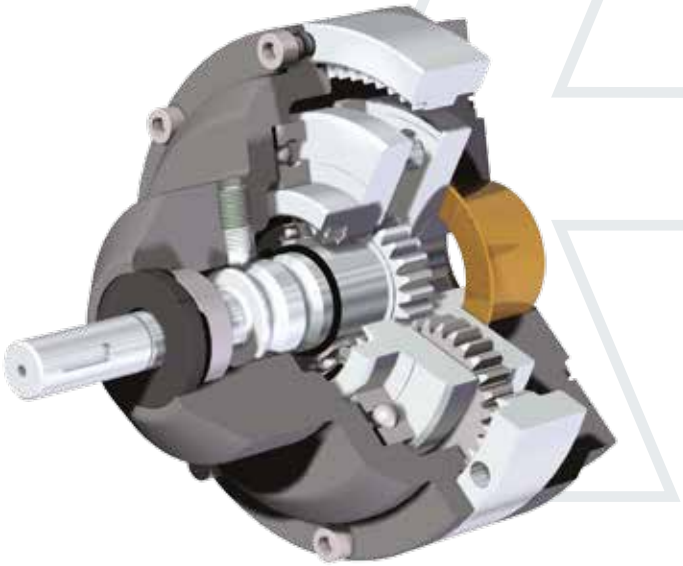
rotork®
Gears



DSIR Gearbox

Dual Speed Input Reducer

Manual Gearbox Applications - Dual Speed Input Reducer

Rotork Gears has developed a new Dual Speed Input Reducer for reducing the operating time on manual gearbox applications.

The DSIR can be used with any manual gearbox or valve with an input flange of F14 or FA14. It is used to reduce the number of input turns required and therefore the operating time for manually operated valves.

Application

The DSIR has two ratios: 1:1 and 4.25:1. Switching between the two ratios is done by simply pushing or pulling on the input shaft. Pull the input shaft for ratio 1:1, push the input shaft for ratio 4.25:1.

The high 4.25:1 ratio gearing is used for the portion of the valve stroke where the torque requirement is high to initially open a valve or the last cycles to close it.

During travel the valve torque usually drops considerably and the lower 1:1 ratio can be employed to reduce the number of input turns required. Typically this can provide a 70% reduction in the number of turns required and the operating time.

Environmental Specification

- IP67 Enclosure
- Temperature -40 to 250 °F

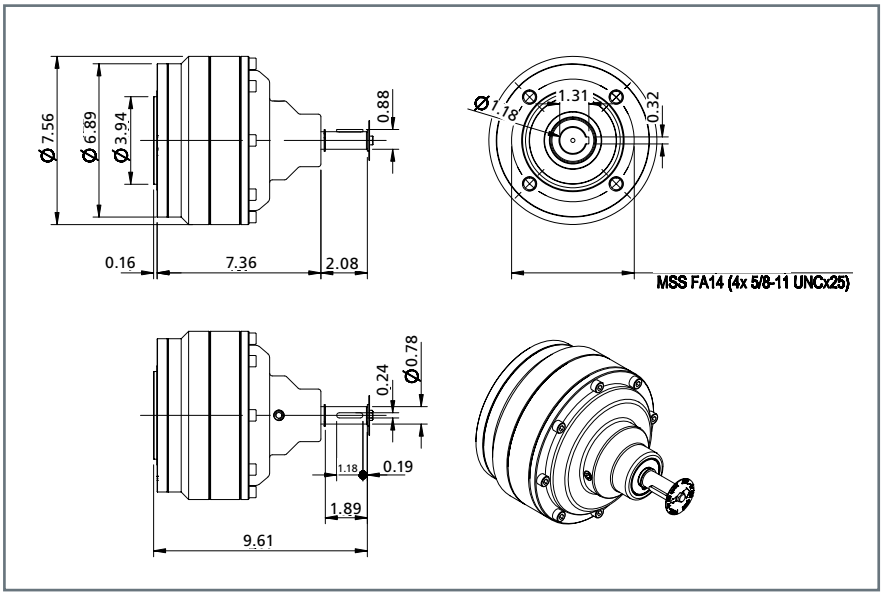
Options

- IP68 Enclosure
- Padlocking device
- Flexible extensions
- Output machining to mount direct to valve

Keeping the World Flowing

DSIR Gearbox

Dual Speed Input Reducer



Product Data

Input Ft-lbs	133
Ratio	1:1 & 4.25:1
MA for Higher ratio	4 ±4%
Output Ft-lbs	531
Max bore in	1.18
Max stem height in	2.36
Weight lbs	55

DSIR Manual Gearbox Material Specification

Components	Material	Notes
Body	Cast Iron	EN-GJL-250
Coverplate	Cast Iron	EN-GJL-250
Input Shaft	Alloy Steel	39NiCrMo3
Radial Ball Bearings	Carbon Steel	
O-ring Seal	NBR	
Planets	Alloy Steel	39NiCrMo3
Planetary External Gear Ring	Carbon Steel	ST52.0S
Planet Carrier	Ductile Iron	EN-GJS-700-2

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